signaling. GTE suggests the introduction of new services would have been greater if the FCC's rules had been revised to permit and encourage new service introduction.²⁹

In summary: Under the current plan, access rates have declined significantly as the market effectively constrained GTE's earnings. Meanwhile, GTE has continued to invest in its infrastructure and network modernization program. Incentive regulation has had no detrimental effect on the quality of service or network performance of exchange carriers. Finally, under incentive regulation, new services have been offered to the public to meet the growing demand for advanced capabilities, but this process has been constrained by the Commission's rules.

II. A NEW PRICE CAP PLAN IS NEEDED THAT ACCOMMODATES THE RAPIDLY CHANGING TELECOMMUNICATIONS MARKETPLACE. (General Issue 2)

The Notice asks for comments on three sets of issues: General, Baseline, and Transitional. In view of their interrelated nature, the Commission should address these issues in an integrated manner.

Among the General issues raised by the Notice (at paragraph 34) is whether the Commission should expand its price cap objectives. While the Commission now believes the goals discussed *supra* that served as the basis for the current plan "remain"

For example, GTE on September 29, 1993 made a tariff filing for a new transport option, MetroLAN, in GTOC Tariff FCC No. 1. There were no formal oppositions against GTE's filing. Nonetheless, implementation of MetroLAN was delayed until February 12, 1994. Lengthy delays have also been experienced for other GTE services such as Video Transport II, a fiber based video offering in GTE Florida serving areas; and European T1, the European equivalent of DS1 services. In both of these cases, GTE had actual customers for these services. Delay in their deployment was the result of the FCC's inability to complete review of GTE's filings within the statutory notice period. Eventually, these filings went into effect with no adjustments to the proposed rates.

valid," it believes (NPRM at paragraph 33) "refinement of [its] goals in this proceeding is warranted." The Commission (id. at paragraph 36) now wishes to incorporate the goals of facilitating economic growth and the creation of jobs through the deployment of a national telecommunications infrastructure. GTE agrees with the Commission's tentative conclusion that its price cap goals should be updated and expanded.

The Notice (at paragraph 35) seeks comment on a set of Baseline issues dealing with the price cap mechanism. These Baseline issues include the determination of an appropriate productivity offset and the proper role of the sharing mechanism. Finally, the Commission asks, in a series of Transitional issues (*id.*), how price caps should be structured to promote effective competition and to adapt to the development of competition over time.

To meet its newly expanded goals in a rapidly changing environment, GTE urges the Commission to move forward **now** to create a new price cap plan that is designed to fulfill the promise of the original price cap concept. This can only be done by addressing the General, Baseline, and Transitional issues identified in the Notice in an integrated fashion. This coordinated action is necessary because the different issues raised in the Notice are inextricably linked as different aspects of the same policy challenge.

Attachment A to these comments, a paper prepared by Dr. Mark Schankerman, develops an analytical framework which captures this vital linkage. Dr. Schankerman (in Section 3) describes the development of the interstate access market over the next few years in terms of a two-stage game played by all potential market participants. In the first stage, firms decide whether to enter the market, how much to invest, and which technologies they will use. In the second stage, the firms that decided to enter in the

first stage compete with one another on the basis of price, new services, quality, and responsiveness to customers' needs. Clearly, as Dr. Schankerman points out, firms will, in part, base their investment decisions in the first stage on their expectations concerning the way the second stage will be played.

This means that the Commission cannot answer the General issue of how to promote the development of the NII without addressing such other issues as how all firms – including exchange carriers – will compete with one another, and how new services will be accommodated within the price cap structure. Exchange carriers, in deciding how and where to invest, will naturally weigh the risks versus the rewards; and these will be affected by resolution of such Baseline issues as the productivity offset and the sharing mechanism. Those who invest in LECs will expect exchange carriers to consider (i) whether, once an investment has been made, the carriers will be able to introduce new services based on that investment, and (ii) whether LECs will be able to adjust the prices, terms, and features of their access services rapidly to meet competition and respond to customers' needs.³⁰

Other potential entrants will base their investment decisions, in part, on how they expect regulation to affect the LECs' response to their entry. If competitors expect regulation to provide them with a pricing umbrella for some time, they may be induced to make inefficient investments which they would not undertake in the face of correct

Lawrence Darby, in his statement attached to USTA's comments, *Price Cap Reform, Financial Incentives and LEC Investments*, explains how capital markets direct resources to the most efficient use. In order to obtain capital from the market, prospective LEC investments must compete with alternative investments available to investors worldwide. Capital markets therefore discipline LEC managers in their choices of projects in which to invest.

market signals. In order to promote efficient investment in the infrastructure, the Commission must establish a framework for how the second stage of Dr. Schankerman's game will be played. Further, as he emphasizes, these ground rules must be established at the outset of the game, not after the bulk of the investment decisions have already been made. Resolution of the Transitional issues is essential if the Commission is to establish the framework necessary for competition and for the efficient deployment of the NII.

The Commission should move forward now with an integrated plan for price cap reform. Action is needed:

First, because the environment has changed since the Commission adopted the plan. The Notice recognizes (at paragraph 19) that incentive regulation has not been sufficiently flexible to accommodate change without constant revision. GTE will discuss infra the changes in technology and in the marketplace which make the adoption of a more flexible plan necessary.

Second, a new plan is needed because the Commission has adopted new goals.

As GTE has shown, *supra*, the goal of promoting infrastructure investment and economic development cannot be met without the adoption of a new framework that will allow the market to determine how the NII should be deployed.

Third, flaws in the current plan have limited the Commission's ability to meet even its original goals. The current plan was intended to promote the introduction of new services and to replicate the outcome of a competitive market. Instead, it has served as an impediment to the introduction of new services and has limited the development of effective competition in access markets. GTE will discuss the limitations of the current plan in more detail *infra*.

In his statement, Dr. Schankerman (in Section 4) describes the elements of a new price cap framework which will promote the Commission's goals in the new access environment. He suggests that the Commission should develop comprehensive access reform as part of the price cap revision process, based on the following principles:

- (i) adoption of functional rather than product oriented price cap baskets;
- (ii) the essential criterion for effective competition based on the presence of an accessible second transport facility in the relevant geographic market;
- (iii) conditioning the extent of regulatory streamlining (including enhanced flexibility in pricing and tariffing of new services) on the degree of competition in the relevant geographic market; and
- (iv) adoption of narrowly defined geographic markets and broadly defined product markets for the determination of effective competition.

GTE recommends Dr. Schankerman's analysis, and sets forth *infra* an integrated proposal for a new price cap plan. This proposal incorporates elements of the reforms proposed by the United States Telephone Association ("USTA") in its recent petition for rulemaking concerning reform of the interstate access charge rules.³¹ GTE supports USTA's suggestion (at i) that "new access rules are necessary to reflect significant changes which have occurred in the access marketplace since the rules were enacted in 1983." Adopting the recommendations set forth in *USTA's Petition* will (*id.*) "result in economically efficient pricing and correct market signals while maintaining universal service support mechanisms and eliminating the regulatory constraints which inhibit

USTA's Petition for Rulemaking, Reform of the Interstate Access Charge Rules, RM-8356, filed September 17, 1993. ("USTA's Petition")

introduction of new services." GTE believes adoption of its integrated price cap proposals would meet the goals set forth in 1991 and the added goals identified in the Notice.

In summary: To be successful, price cap reform must address all of the issues raised in the Notice — General, Baseline and Transitional — on an integrated basis because these issue are inextricably linked. Accordingly, GTE urges the Commission to take action in this proceeding adopting a new, integrated set of price cap rules that will promote the FCC's revised objectives in a rapidly changing environment.

III. TECHNOLOGICAL ADVANCES AND CONVERGENCE COMBINED WITH GROWING COMPETITION REQUIRE A NEW PRICE CAP PLAN.

1. Technological convergence has eliminated traditionally separate markets and networks. (Transition Issue 1c)

Chairman Hundt recently observed: "We are witnessing an evolution of convergence of networks and markets, whether it be telephone, broadcast, cable, wireless or satellites, domestic and international." In the world of digital communications, a bit is just a bit. It can be a "1" or a "0", but those two characters can convey all forms of information over the wires and airwaves of this country and the world. It is no longer necessary to separate voice, data, and video based on transmission media, and industry participants can no longer be identified based on technological distinctions, *e.g.*, wireline or wireless.

When the current structure of access charges was designed, video belonged to the airwaves while voice was carried predominantly over wire. The explosive growth of

Statement of Chairman Reed E. Hundt before the Subcommittee on Commerce, Justice, State and the Judiciary, Committee on Appropriations, United States Senate, April 28, 1994.

voice and data transmission as non-wireline services was just beginning. It was assumed that exchange carriers faced little competition for interstate access services.

All of these circumstances have changed dramatically.

The rapid development of technology in recent years has made it possible for information of all types to be carried on most of the transmission media deployed today. Both wireline and wireless networks are capable of carrying voice, data, and video. This has enabled a wide variety of firms to enter the interstate access market since the Commission's rules were put in place. These firms have sought partners in strategic alliances and mergers that make the most effective use of each firm's respective strengths. Parties involved in such alliances or mergers include Cox, TCI, Continental, Comcast, Time Warner Cable and Teleport; TCI, ATC and Telecable; U S WEST and Time Warner; BellSouth and Prime Management; MCI and Western Union; MCI and British Telecom; AT&T and McCaw; and TCI and McCaw.³³

The result is a convergence of what have previously been considered separate industries, such as telephone, cable television, wireless, computer, and information services. This convergence has several important implications for price cap policy.

<u>First</u>, it means that a large number of service providers have entered, and are continuing to enter, markets previously thought to be the sole preserve of exchange

This list is not exhaustive but includes mergers and/or alliances between cable television firms and Competitive Access Providers ("CAPs"), cable television firms and exchange carriers or Interexchange Carriers ("IXCs"), and cable television firms with wireless providers. For a more comprehensive list, see, Attachment B, Strategic Alliances in the Telecommunications Industry.

carriers, e.g., CAPs, cable TV, cellular, Personal Communications Services ("PCS"), and electric power utilities.³⁴

Second, it means that potential entrants into the access market are not necessarily small start-up ventures. On the contrary, the most prominent rivals for the LECs today are large firms with well-established bases in one or more of the converging markets such as AT&T, MCI, or TCI. These firms are not fledglings that need to be protected; they are established players well equipped to compete with exchange carriers.

Third, it creates an unprecedented degree of uncertainty regarding the best choice of technology. At this point, no one can say with confidence to what extent customers will be linked to the information superhighway via fiber, coaxial cable, copper, radio, or by a combination of these technologies. Because of this uncertainty, it is particularly important that the LEC price cap plan be structured to allow customers to make independent choices among carriers and technologies.

In summary: Previous distinctions among telecommunications markets and networks are rapidly eroding. A variety of service providers have communications links to homes and businesses throughout America. Technology has opened the local exchange market to a wide variety of service providers. The Commission must act now to eliminate regulatory asymmetries that prevent the exchange carriers from competing

The same convergence has created technological opportunities for exchange carriers to provide services, such as video, that compete with other established industries. Artificial barriers to LEC entry into these businesses must be eliminated, just as regulatory and legislative actions are eliminating entry barriers into the interstate access business.

with other providers and, in doing so, deny consumers the ability to select from a complete range of service providers.

2. Technological advances have created a demand for services that cannot be accommodated by the current plan for incentive regulation.

The current plan was based on the now-obsolete Part 69 rate element structure. A paper prepared by the FCC staff (the "Staff Paper") recognizes that this structure has had a "chilling effect" on the introduction of new services. Broadband services, which were only talked about in 1983, cannot be placed in a rate structure that totally ignores their existence. Customers are demanding and exchange carriers want to provide new services based on broadband and/or advanced technologies such as: the Advanced Intelligent Network ("AIN"), Asynchronous Transfer Mode ("ATM"), Synchronous Optical NETworks ("SONET"), and image compression technologies like Asymmetric Digital Subscriber Line ("ADSL"), to name a few. Indeed, hybrid services such as virtual private line make obsolete the existing rate structure under Part 69 which segregates switched and dedicated services. The problem of classifying new services discussed supra exists because the current Part 69 rate structure does not accommodate many new services available today.

LEC customers today want voice communications, data communications, video transmission capabilities, connections to and among data bases, linkage of geographically separate office buildings, local services, national services, and international services. Many want to control their own systems through services that

Federal Perspectives on Access Charge Reform, authored by the Common Carrier Bureau's Access Reform Task Force, dated April 30, 1993 ("Staff Paper") at 41.

could be offered by exchange carriers. Not only do customers demand these advanced services; they demand them in arrangements that meet their individualized needs, and at competitive prices. At the heart of the problem are restrictions that prevent LECs from offering services to satisfy their customers' wants and needs in a timely and responsive manner and at a price that reflects their value. If regulation does not allow exchange carriers to offer these services to their customers, those customers will seek alternative suppliers.

In summary: The current plan was based on a Part 69 rate element structure designed around the switched and dedicated services that existed at that time. In the last ten years, the environment has changed profoundly. Broadband and/or advanced services simply do not fit within the existing Part 69 rate elements. A more adaptable price cap structure is needed to promote, rather than impede, the introduction of new services.

3. Access competition exists today and is growing rapidly. (Transitional Issue 1a)

The Notice (at paragraph 95) seeks comment concerning the present and likely future state of competition in access markets. The simple answer is that significant competition has developed in many access markets, and access competition can be expected to increase rapidly over the next few years.

These developments make it urgent that the Commission adopt rules to promote effective competition that benefits consumers. The Commission's task in this proceeding is not to make a determination regarding the degree of competition in any given access market but to establish a proper framework for defining and evaluating access markets. Such a determination can then be made for each access market

whenever the conditions in that market can be shown to satisfy the criteria established as part of the framework.

The purpose for developing a record on competition in this proceeding should be to demonstrate that access competition does exist and that it is reasonable to expect it to explode in the next few years. There is ample evidence that this is the case, some of which will be summarized *infra*. Given such a finding, it is reasonable for the Commission to establish a framework that will adapt to, and promote, the expected growth of competition. The evidence presented here should also be useful in establishing reasonable parameters for this framework.

Access markets are attractive to potential entrants for a number of reasons.

Eirst, access demand is highly concentrated. This is true for GTE, even though its operating area comprises more states, is more diverse, and is more rural than those of the Bell Operating Companies. Six percent of GTE's end user customers account for 46 percent of GTE's interstate switched access demand. A smaller subset, only seven tenths of one percent of the customers, account for 20 percent of switched access demand. Six tenths of one percent of GTE's end user customers account for all of GTE's special access channel terminations. The top thirteen percent of GTE's central offices originate or terminate 71 percent of GTE's switched access demand, and 92 percent of GTE's special access channel terminations are located in these offices.

<u>Second</u>, interstate access services have traditionally carried relatively high margins.

Third, the rigidity of the Commission's rules have created artificial rate relationships among access rates, and have made it difficult for LECs to adjust their offerings in response to competition.³⁶

Fiber-based CAPs are one of the fastest growing competitors for the traditional business of exchange carriers. CAPs have the ability to deploy cutting-edge service to a select market of high-volume users and to offer targeted, reduced prices that reflect specific market considerations rather than regulatory constraints.

Most CAPs initiated service by providing transport facilities for IXCs. For some CAPs, this is still a major source of revenue. CAPs soon turned to building local networks providing businesses with access to their long distance carriers, as a substitute for traditional LEC network access. CAPs have already captured a significant portion of the markets they have chosen to enter. A survey of customers in

For example, LECs have been unable to offer volume or term discounts on switched access services, even though such options are commonly available on special access services, as well as on the switched service offerings of other carriers, such as IXCs. GTE filed a request for waiver of Part 69 on August 3, 1993 to implement an innovative switched access discount plan, even though it is not clear from existing rules that a waiver is needed. GTE has demonstrated that such a plan can be implemented in the interstate jurisdiction and would result in real price levels that are not predatory, *i.e.*, would cover average variable cost. The Commission has not taken any action on GTE's request. In addition, the Part 69 waiver process also forced delays in providing other services to IXCs, notably Line Information Data Base, SS7 interconnection, and O- Transfer.

ten metropolitan areas shows that CAPs now provide more than thirty percent of the high-capacity circuits in those markets.³⁷

CAPs also have connected geographically separated offices of large businesses with each other, and a growing number of CAPs are beginning to initiate a major expansion into the switched services area of local communications. Estimates project that switched services will comprise 44 percent of total CAP revenue by 1997.38

Teleport, a CAP jointly owned by five cable companies, has installed the switches across the country.³⁹ CAPs now have at least 12 Class 5 switches in place, eight digital tandem switches, and 15 ATM switches.

The list of cities served by CAPs is growing so rapidly that it is difficult to keep an accurate count. In GTE's serving areas, CAPs are operating in major cities (Los Angeles, Durham, Tampa), but also in many smaller communities, including Fort Wayne, Indiana and Grand Rapids, Michigan; Beaverton, Oregon and Hobbs, New Mexico; Andalusia, Alabama and Broken Arrow, Oklahoma. Attachment C provides a

See, Harris Paper at B-6. This is consistent with the results from a similar study of GTE's serving area in Tampa. These high capacity services now represent a large proportion of the access market. Indeed, with the growth of various alternative forms of access, traditional LEC switched access now represents a much smaller part of the access market than it once did. For example, NYNEX estimates that "the share of the total switched access market that uses NYT switched access facilities is only about 40%." NYT switched access facilities refer here to common line facilities. NYNEX has defined the total switched market "as comprised of switched MOUs, special access equivalent MOUs, bypass MOUs, and new MOUs." (See, NYNEX Transition Plan to Preserve Universal Service in a Competitive Environment, Petition for Waiver, Exhibit 10, page 26, filed December 15, 1993, DA 93-1537.)

³⁸ The "ALT Report," *Connecticut Research*, 1993, at VI-3.

[&]quot;Teleport Communications Prepares for Local Service Offensive," Local Competition Report, October 4, 1993.

list of cities in GTE's serving areas that are served by at least one alternative provider.

Plans have been announced for construction of networks in many additional cities.

Attachment C also shows GTE central office serving areas where alternative providers are established or have sales activity in progress. There is at least one CAP in each of the ten largest GTE wire centers, ranked by usage. But there is also a provider in Wadsworth, Ohio, which ranks number 397 on the list of GTE's offices, and another in Keller, Texas, which is number 516 on the list.

It is clear from these data that CAPs are growing rapidly, and that their operations are no longer confined to a few areas. Firms will invest in fiber networks wherever there are concentrations of demand that will justify them. This demand need not be in a major population center.

MFS has filed with the Illinois Commerce Commission to provide exchange service in downtown Chicago.⁴⁰ MFS, through its subsidiary MFS Intelenet, is targeting small and medium sized business customers. It announced some months ago:

MFS Intelenet is the nation's only full service telecommunications company designed exclusively to meet the needs of small to medium sized businesses (5-40 lines) by providing local and long distance service over state-of-the-art facilities.⁴¹

MFS Intelenet already has secured its own numbers (NXX codes) for assignment to customers in New York, and Teleport has announced that it expects to

[&]quot;Application of MFS Intelenet of Illinois, Inc.," Illinois Commerce Commission, Docket No. 93-0409, 1993.

MFS Communications Company, Inc., "News Release," MFS Intelenet, Inc. Q&A, October 5, 1993, N.Y.

get "its own numbers this week."⁴² Teleport also has filed applications with state regulatory agencies seeking authority to offer switched local telephone services in Chicago and Seattle.⁴³

In GTE's operating area, cable affiliated CAPs are present in Dallas and Seattle (TCI Digital Direct), St. Petersburg, FL (Jones Lightwave), Indianapolis and Lafayette IN (Indiana Digital Access), and Dallas and Los Angeles (Teleport). CAPs located in GTE's operating area provide a multiplicity of services in direct competition with GTE such as voicegrade, DS1, DS3, fractional T-1 and T-3, ATM, SONET, Fiber Distributed Data Interface ("FDDI"), Digital Data Service ("DDS"), Datafiber, channelized high capacity, dedicated WATS, LAN interconnection, and videoconferencing.⁴⁴ Although the Commission (at paragraph 22) refers to "incipient competition," the CAPs' inroads into exchange service goes far beyond incipient.

CAPs are not the only important LEC competitors. IXCs are competing for intraand interexchange services. In 1984 only five states allowed intraLATA competition;
thirty-nine states do so today. MCI has announced plans to enter the LECs' switched
access market with its MCIMetro subsidiary. MCI plans to spend \$20 billion over the
next six to eight years to upgrade its network and \$2 billion to expand and enhance its

⁴² "MFS Activates Its Own Block of Numbers in N.Y.C.," *Communications Daily*, April 13, 1994, at 3.

⁴³ "Teleport Plans Switched Services in Chicago, Seattle," *Telecommunications Reports*, April 25, 1994, at 22.

See Attachment C for a list, by city, of alternative service providers with a market presence in GTE's territory, the services provided, and the fiber miles in-place. Attachment C also provides a list GTE's central office areas where alternative service providers are either in operation or have sales activity.

local distribution facilities in direct competition with exchange carriers in order to reduce its access charges.⁴⁵

Cable television companies have ubiquitous networks already in place.⁴⁶ A recent study by the Commission's Office of Plans and Policies examined the investments required to equip a cable network to provide telephone service.⁴⁷ The study found the necessary investment to be only \$207 per line. Vendors recently have announced the availability of equipment for this purpose, quoting an average price of \$300 per line.⁴⁸ TCI, even without its aborted merger with Bell Atlantic, "will plunge headlong into the telephone business by outfitting all of its cable systems to carry residential telephone traffic by the year 1996...." Cable companies are actively testing the provision of telephone services. Time Warner is testing voice-over-cable in

⁴⁵ Telecommunications Reports, "MCI Reportedly Planning Local Networks Across USA," January 3, 1994, at 5.

Cable networks today pass 98 percent of television-equipped households in the United States. See Huber-Myth at n.81.

See, David P. Reed, Office of Plans and Policy, Federal Communications Commission, "The Prospects for Competition in the Subscriber Loop: The Fiber-to-the-Neighborhood Approach," Presented at the Twenty-First Annual Telecommunications Research Policy Conference, Solomon Island, MD, September 1993.

See "Scientific-Atlanta's New Device to Allow Phone Calls Using Cable-TV System," Wall Street Journal, November15, 1993, at B6. Patrick Earle of J. P. Morgan Securities reports (Nov. 1993) that MCI and Jones Intercable are using Scientific-Atlanta's "coaccess" equipment for their trials in Alexandria, Virginia and Chicago. Earle says "this trial reinforces our belief that existing cable infrastructure will be used as the basis for a second competing wireline telecommunications network, delivering all local telephony services as well as CATV and advanced broadband services."

⁴⁹ K. C. Neel, "TCI, Bell Atlantic: On to Plan B," *Cable World*, Vol. 6, No.10, March 7, 1994, at 1.

Queens, NY, MCI and Jones Intercable in Alexandria, VA, and U S WEST and Time Warner in Orlando, FL.

Another ubiquitous access network already exists in the form of wireless systems. Cellular telephone services have grown at a spectacular rate, increasing more than eightfold in the last five years.⁵⁰ Recent studies have shown that cellular rates are already competitive with wireline telephone rates for many customers, including residence and small business users.⁵¹ Conversion to digital technology is making possible dramatic increases in the capacity of cellular systems.⁵²

In 1993, there were more than 16 million cellular subscribers nationwide. It is important to keep in mind that while cellular market penetration is usually given in terms of individual subscribers, telephone penetration is reckoned in terms of households.

When adjusted for this difference in reporting, forecasts of cellular growth by

See, Harris Paper. Table B-7, Appendix B, of Professor Harris' paper provides data on the growth in cellular subscribers and revenues between 1985 and 1993.

See, for example, Edward C. Beauvais, Local Exchange Service: Where Is Competition Taking Us? Presented at the Twenty-third Annual Conference of the Institute of Public Utilities, Williamsburg, Virginia, 11 December 1991 ("Beauvais"). Beauvais performed a detailed analysis comparing GTE's local and toll rates with those of cellular providers. The study was based on the usage patterns of local subscribers in a small exchange in rural Wisconsin, and took into account the various discount options available in that area from both wireline and cellular providers. See also Update on Cellular: How Cellular is Cheaper than Landline, Teleconnect, February 1993.

Huber, The Enduring Myth of the Local Bottleneck, March 14, 1994 ("Huber-Myth"), at 35. Digital technology will expand the capacity of all wireless telephony from 5 to 20 times present levels.

independent analysts predict that nearly half of U.S. households will have cellular service by the end of the decade.⁵³

A new generation of wireless technology, Personal Communications Service ("PCS") will be capable of delivering access services to an even broader base of customers. Combinations of firms are being assembled to make massive investments in this technology. MCI, for example, with backing from British Telecom, has organized a consortium of more than 250 cable companies, CAPs, and independent telephone companies, with plans to spend \$10 billion over the next decade to build a PCS system that will cover 90 percent of the U.S. population.⁵⁴ While the Commission has decided to auction additional frequencies for use by PCS, GTE has recently announced the availability of a service which will provide PCS features using existing cellular service frequencies.

The Commission has itself predicted that there will be sixty million PCS users within ten years.⁵⁵ Bert Roberts, Chairman of MCI, has cited predictions of 80-90

⁵³ Beauvais, page 17 and Figure 2.

Huber-Myth at 34. MCI has more recently announced the purchase of an interest in Nextel, a wireless provider. The alliances planning PCS networks are well equipped financially to make these investments. MCI/British Telecom have revenues roughly double that of the largest telephone company. AT&T/McCaw have annual revenues of \$66 billion, which is roughly equal to those of the five largest RBOCs combined.

⁵⁵ NPRM and Tentative Decision at 26, Amendment of the Commission's Rules to Establish New Personal Communications Services, CC Docket No. 90-314, August 14, 1992.

million wireless subscribers by the year 2004.56 This is about equal to the number of households that have telephone service in the United States today.

Power utilities have also built, and are continuing to build, widespread fiber networks. Several utilities in the rural South have recently announced that they are erecting networks to provide cable service in competition with cable operators in their regions and they plan to expand into data services.⁵⁷

Tampa Electric Co. ("TECO") already has proposed to the National

Telecommunications and Information Administration ("NTIA") that the electric network is
the natural choice for establishing tomorrow's communications links. TECO bases this
assertion on the fact that "the electric network reaches every neighborhood and
office...."

TECO is presently negotiating joint ventures with MFS and Intermedia
Communications of Florida, Inc. Another Florida utility, Lakeland Electric and Water, is
developing a plan "to build the electronic pathway that will some day transmit video,
computer, and information services to homes and businesses — the so-called
information super highway."59

MCI Will Invest \$1.3 Billion in Nextel to Offer Nationally Branded Wireless Services, PR Newswire, February 28, 1994.

⁵⁷ Rivkin, Steven R., Look Who's Wiring the Home Now, The New York Times Magazine, September 26, 1993, at 46.

See, Ruiz, Frank, Path of Power: TECO is poised to be a tollbooth on the information superhighway, Tribune, Tampa, FL, November 22, 1993, Business & Finance-13.

See, Gustafsen, Kurth, City studies fiber-optic future, The Ledger, Lakeland, FL, March 13, 1994, at 1.

Electric companies have developed advanced communications systems that allow customers to monitor and control fluctuations in electric usage. Developing their systems has given utilities valuable expertise in laying fiber optics and managing mobile radio systems as part of their communications. Lakeland Electric and Water, a perfect example, plans on investing "more than \$3 million dollars to install fiber-optic cable that can carry voice communications and computer data among its power plants, substations, and offices."60

In summary: Competition in the local exchange has gone beyond "incipient." It has penetrated the large business market segment and is expanding rapidly into the small and mid-size business market segment. If exchange carriers are to be able to meet competition offered by such multiple service providers as CAPs, cable, alternate access providers, IXCs, and other utilities, the Commission must reform its rules to assure effective competition that benefits consumers.

- IV. GTE PROPOSES A NEW PRICE CAP PLAN THAT WOULD FULLY ACHIEVE THE COMMISSION'S GOALS WHILE PROVIDING LEC PRICING FLEXIBILITY.
 - 1. The Commission's goals should be expanded to meet marketplace demands and to protect the public interest. (General Issue 1)

The Commission's initial goals for incentive regulation were: ensuring that LEC rates are just, reasonable, and nondiscriminatory; promoting a communications system that offers innovative, high quality services; encouraging the LECs to modernize their networks, deploy new technologies, and offer new services; and permitting adjustment of relative rates to achieve more efficient relationships. To these, the Notice (at

paragraphs 31-34) now proposes to add the goals of promoting development of the NII, facilitating economic growth and the creation of jobs for American workers. The Notice also reiterates the Commission's long-standing concern for the preservation of universal service.⁶¹

GTE agrees that the Commission's goals should be expanded as proposed in the Notice. However, because of the shortcomings of the existing plan it has not promoted even the Commission's earlier, more limited objectives effectively. Similarly, the plan has not been sufficiently adaptable to deal with the changes in technology and competition experienced during the review period, much less with the more rapid developments that are likely in the near future.

In the following sections, GTE will propose an integrated set of price cap reforms that will allow the Commission to promote effectively its newly expanded goals in the rapidly changing telecommunications environment.

In summary: GTE supports the expansion of the Commission's goals, and proposes the price cap reforms that will be necessary in order to achieve them.

In USTA's Petition, the industry set forth a list of objectives for reform of the Commission's Rules. These were: 1) Promote Universal Service; 2) Promote Introduction of New Services and Technologies; 3) Support Balanced Competition in Access Markets; 4) Promote Efficient Use of the Network: 5) Encourage Continued Development of an Advanced National Telecommunications Infrastructure; 6) Prevent Unreasonable Discrimination; and 7) Minimize Regulatory Burdens. GTE believes that these goals remain valid, and are consistent with those proposed in the Notice.

2. The new price cap plan should be based on a new, more flexible rate structure. (Baseline Issue 8)

When adopting access charges in 1983, the Commission chose to codify in Part 69 a prescribed list of access rate elements for all exchange carriers. In turn, the current plan for incentive regulation was based on this rate structure. The price cap baskets, for example, mirrored the rate element categories in Part 69. The structure which met the conditions of the industry in 1983 has become an impediment in 1994.82

In developing the current plan, the Commission placed great emphasis on the introduction of new services and the procedures for introducing them under price caps. However, it has not promoted new services as effectively as it should, and the Notice seeks comment (at paragraph 83) on how the current plan can be improved in this respect. Part of the problem lies with the new-service pricing rules, but revising those rules will do little good as long as the existing rate structure is retained. To successfully promote both new services and competition, the new price cap plan must be based upon a more adaptable structure.⁸³

The Part 69 structure is an anomaly in the history of regulation by this Commission and other agencies. No such structure has ever been applied to AT&T. This has allowed AT&T greater freedom to introduce in a timely manner new services based on advanced technologies. For example, AT&T recently announced its plan to offer a "virtual switching network." This service, which will allow customers to access AT&T's ATM services, makes the movement between narrowband and broadband networks possible. According to AT&T, "This makes ATM services possible ondemand, at any time." Communications Daily, April 28, 1994, at 5. The LECs would require either a rule change or a waiver to offer this type of new service. State commissions generally do not have such rigid structures, except to the extent that they may mirror the interstate structure for access rates.

For example, services such as virtual private line, ISDN, ATM, SONET, and customer controlled reconfiguration capabilities for switched and dedicated circuits are impossible to "fit" into the existing rate elements.

The Notice seeks comments (at paragraph 42) on the most effective structure for price cap baskets and bands. As the Notice recognizes (at paragraph 41), these must be carefully crafted to provide logical groupings of services, to allow competition to develop, and to maintain price cap protection, where needed, while competition is developing. These goals cannot be met by continuing to link the design of price cap baskets to the existing Part 69 structure. The Commission should adopt a new structure which provides only the minimum codification of rate elements needed to promote the Commission's policies. In turn, this will free the Commission to adopt a more effective structure of baskets and bands.

GTE proposes that the codification of rate elements in Part 69 should be eliminated, with the exception of those elements necessary to implement specific public policy programs adopted by the Commission. These public policy elements might include the Subscriber Line Charge ("SLC"), the Special Access Surcharge, the interconnection cross-connect element, the transport interconnection charge, and recovery mechanisms for the Universal Service Fund ("USF"), Lifeline, and Linkup programs.⁶⁴

The Notice seeks comment (at paragraph 95) on whether rate structure rules should be relaxed selectively for services or markets subject to competition. As stressed *supra*, where competitive alternatives exist the Commission should streamline its regulation; and GTE proposes *infra* how this should be done. But GTE believes the

See, USTA's Petition at 21-22 for more details. Proposed rules for a new "Part-X" are provided in Attachment 7 to USTA's Petition. Proposed rules for public policy elements are in "Part Z" of the same attachment.

current rate structure rules are inappropriate regardless of the amount of competition present. Customers in less competitive areas should be able to benefit from the introduction of new services. The current rate structure should be reformed because it no longer serves any useful purpose, and because it is incompatible with the timely adoption of new technology.⁶⁵ These reasons are equally valid in all market areas.

In summary: Although the Commission has a goal of promoting new services, its rate structure rules inhibit the introduction of new services. Many new services are difficult to classify within the existing rate structure. To promote both new services and competition, the new price cap plan should be based on a more adaptable structure which codifies only elements mandated by public policy concerns.

- 3. Price cap rules should be structured to adjust the degree of regulation to match the extent of competition in each market.
 - A. The Commission must allow proper economic signals to dictate market entry. (Transition Issues 1b & 2)

The Commission seeks to promote competition in markets for interexchange services, information services, and interstate access services. This policy is based on the presumption that a competitive market will assign resources more efficiently, promote more rapid innovation, and provide consumers with more choices than any system of regulation the Commission could devise. The purpose of regulation is to serve as a substitute for competition in those markets where competitive pressure is

The Notice expresses concern (at paragraph 83) that new services should be made available as widely as possible. The Commission would address that concern most effectively by reforming the rate structure in all areas and not only in those most subject to competition.

not sufficient to impose market discipline on the providers.⁶⁶ While necessary in some cases, regulation is an imperfect substitute for competition — as the Commission recognized in establishing a pro-competitive policy.

As competition develops in a market, it is important for the Commission to reduce the degree of regulation in that market to permit competitive market forces to replace the artificial substitute provided by regulation. Such a policy will:

- Provide correct price signals to potential entrants. If the incumbent LEC is not allowed to respond to competition, new firms may make inefficient investments based on prices which differ from those a competitive market would set.⁶⁷
- Allow the incumbent firm to compete effectively. As the Notice observes (at paragraph 94), "price and service regulation of the LECs could unnecessarily restrict the LECs' ability to compete, and thus deny the full benefits of competition to consumers." To the extent that regulation of LEC services creates an umbrella for alternative providers, it will reduce the market pressure on these carriers to offer consumers the best possible prices and service.

As in the interexchange market, most of the benefit consumers realize from a pro-competitive policy comes in the form of rate reductions and new service options originated with the incumbent firm. The time to establish the ground rules under which

One of the reasons the Commission adopted price cap regulation, in place of rateof-return regulation, was that it found that price caps would more closely approximate the incentives in a competitive market. See NPRM at paragraph 12.

Once inefficient entry has occurred, these entrants will become stakeholders in the regulatory process, where they will seek to protect themselves by prolonging regulatory price umbrellas. See Dr. Schankerman's discussion at 3-4.